

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): In a communication network ~~including a radio network providing operable to provide~~ communication services to a plurality of mobile stations operating within the ~~[[radio]]~~ communication network, ~~wherein each mobile station [[is]] being in communication with the [[radio]] communication network via an associated communication link, a method for scheduling the communication services comprising: the steps of:~~

~~for each mobile station~~ determining a characteristic of the associated communication link~~[[;]]~~ for each mobile station;

forming a group of mobile stations from the plurality of mobile stations based upon the characteristic of the associated communication link; and

scheduling communication services collectively for the group~~[[.]]~~ of mobile stations.

Claim 2 (currently amended): The method of claim 1, wherein the characteristic of the associated communication link comprises at least one of: ~~the group of characteristics comprising:~~ path loss, power control setting, bit error rate, and delay.

Claim 3 (currently amended): The method of claim 1, wherein ~~the step of~~ forming a group of mobile stations comprises forming a plurality of groups ~~of the plurality of~~ mobile stations, and ~~the step of wherein~~ scheduling communication services collectively for the group of mobile stations comprises scheduling communication services collectively for each group~~[[.]]~~ of the plurality of groups of mobile stations.

Claim 4 (currently amended): The method of claim ~~[[3]]1~~, wherein ~~[[each]]~~ the group of mobile stations comprises mobile stations ~~of the plurality of mobile stations~~ having ~~substantially alike characteristics of the communication links[[.]]~~ with similar characteristics.

Claim 5 (currently amended): The method of claim ~~[[3]]1~~, wherein ~~the step of~~ scheduling communication services collectively for ~~[[each]]~~ the group of mobile stations comprises scheduling communication services ~~for each group of the plurality of group~~ on a recurring basis.

Claim 6 (currently amended): The method of claim ~~[[3]]~~1, wherein ~~the step of~~ scheduling communication services collectively for ~~[[each]]~~ the group of mobile stations comprises scheduling communication services ~~for each group of the plurality of group~~ on a sinusoidal basis.

Claim 7 (currently amended): The method of claim 1, wherein ~~the step of~~ determining a characteristic of the associated communication link for each mobile station comprises determining a power control state.

Claim 8 (currently amended): The method of claim 1, wherein ~~the step of~~ scheduling communication services collectively for the group of mobile stations comprises transmitting schedule information to the group of ~~the plurality of~~ mobile stations.

Claim 9 (currently amended): The method of claim 1, wherein ~~the step of~~ scheduling communication services collectively for the group of mobile stations comprises scheduling communication services for the group of mobile stations ~~[[so as]]~~ to minimize the transmit power needed to reach each mobile station of the group of mobile stations.

Claim 10 (currently amended): The method of claim 1, wherein the group of mobile stations comprises a first mobile station ~~scheduled~~ to receive a downlink transmission and a second mobile station ~~requesting to request~~ requesting to request an uplink timeslot.

Claim 11 (currently amended): An apparatus for scheduling communication services within a communication network, the communication network providing communication services to a plurality of mobile stations operating within the ~~[[radio]]~~ communication network, ~~wherein each mobile station is in communication with the communication network via an associated communication link~~, the apparatus comprising:

a base station system operable to establish ~~and maintain~~ communication links between the communication network and each of the plurality of mobile stations, ~~[[and]]~~ the base station system ~~further~~ being further operable to determine a characteristic of each of the communication links;

a scheduling algorithm ~~within the base station system~~, ~~the base station system~~ operating in accordance with the ~~scheduling algorithm~~ base station system to form a group of mobile stations from the plurality of mobile stations based upon the characteristic~~[[s,]]~~ of

each of the communication links and to schedule communication services collectively for the group[[.]] of mobile stations.

Claim 12 (currently amended): The apparatus of claim 11, wherein the characteristic of each of the communication links comprises at least one of ~~the group of characteristics comprising~~ path loss, power control setting, bit error rate, and delay.

Claim 13 (currently amended): The apparatus of claim 11, wherein the base station system [[is]] operates in accordance with the scheduling algorithm to form a plurality of groups of ~~the plurality of~~ mobile stations and to schedule communication services for the plurality of groups[[.]] of mobile stations.

Claim 14 (currently amended): The apparatus of claim [[13]]11, wherein [[each]] the group of mobile stations comprises mobile stations ~~of the plurality of mobile stations~~ having substantially alike characteristics of the communication links[[.]] with similar characteristics.

Claim 15 (currently amended): The apparatus of claim [[13]]11, wherein the scheduling algorithm comprises a recurring scheduling algorithm.

Claim 16 (currently amended): The apparatus of claim [[13]]11, wherein the scheduling algorithm comprises a sinusoidal scheduling algorithm.